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| APPLICATION NO.       | FILING DATE                             | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO.        |  |  |
|-----------------------|-----------------------------------------|----------------------|-------------------------|-------------------------|--|--|
| 09/990,011            | 11/21/2001                              | Jai Menon            | BELL-0170/01415         | 6099                    |  |  |
| 38952                 | 7590 10/22/2004                         |                      | EXAM                    | EXAMINER                |  |  |
| WOODCOCK WASHBURN LLP |                                         |                      | MUHEBBULL               | MUHEBBULLAH, SAJEDA     |  |  |
| -,                    | TY PLACE - 46TH FLOOI<br>PHIA, PA 19103 | ₹                    | ART UNIT                | PAPER NUMBER            |  |  |
|                       | ,                                       |                      | 2174                    | ·                       |  |  |
|                       |                                         |                      | DATE MAILED: 10/22/2004 | DATE MAILED: 10/22/2004 |  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.



|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                     |                                                                                                                                   |                                                                                                      | /_         |  |  |  |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------|--|--|--|
| Office Action Summary                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Applicat                                                                                                                            | ion No.                                                                                                                           | Applicant(s)                                                                                         | 91         |  |  |  |
|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 09/990,0                                                                                                                            | )11                                                                                                                               | MENON ET AL.                                                                                         | ,          |  |  |  |
|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Examine                                                                                                                             | r                                                                                                                                 | Art Unit                                                                                             |            |  |  |  |
|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Sajeda 1                                                                                                                            | Muhebbullah                                                                                                                       | 2174                                                                                                 |            |  |  |  |
| Period fo                                     | The MAILING DATE of this communic<br>or Reply                                                                                                                                                                                                                                                                                                                                                                                                                           | ation appears on th                                                                                                                 | e cover sheet with the                                                                                                            | e correspondence addre                                                                               | 'SS        |  |  |  |
| THE - Exte after - If the - If NO - Failu Any | ORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNIC nsions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this communication of the provided for reply specified above is less than thirty (30) period for reply is specified above, the maximum stative to reply within the set or extended period for reply wreply received by the Office later than three months afted patent term adjustment. See 37 CFR 1.704(b). | CATION.  f 37 CFR 1.136(a). In no e nication.  days, a reply within the statory period will apply and will by statute, cause the ap | vent, however, may a reply be<br>atutory minimum of thirty (30) o<br>will expire SIX (6) MONTHS fro<br>plication to become ABANDO | timely filed days will be considered timely. om the mailing date of this comm NED (35 U.S.C. § 133). | unication. |  |  |  |
| Status                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                     |                                                                                                                                   |                                                                                                      |            |  |  |  |
| 1)⊠                                           | Responsive to communication(s) filed                                                                                                                                                                                                                                                                                                                                                                                                                                    | l on <i>11/21/01</i> .                                                                                                              |                                                                                                                                   |                                                                                                      |            |  |  |  |
| 2a)□                                          | _                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                     |                                                                                                                                   |                                                                                                      |            |  |  |  |
| 3)                                            | · <del>-</del>                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                     |                                                                                                                                   |                                                                                                      |            |  |  |  |
| ·                                             | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                     |                                                                                                                                   |                                                                                                      |            |  |  |  |
| Disposit                                      | ion of Claims                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                     |                                                                                                                                   |                                                                                                      |            |  |  |  |
| 4)⊠                                           | Claim(s) 1-24 is/are pending in the application.                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                     |                                                                                                                                   |                                                                                                      |            |  |  |  |
|                                               | 4a) Of the above claim(s) is/are withdrawn from consideration.                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                     |                                                                                                                                   |                                                                                                      |            |  |  |  |
| 5)                                            | ☐ Claim(s) is/are allowed. ☐ Claim(s) <u>1-24</u> is/are rejected. ☐ Claim(s) is/are objected to.                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                     |                                                                                                                                   |                                                                                                      |            |  |  |  |
| 6)⊠                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                     |                                                                                                                                   |                                                                                                      |            |  |  |  |
| 7)                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                     |                                                                                                                                   |                                                                                                      |            |  |  |  |
| 8)[                                           | Claim(s) are subject to restrict                                                                                                                                                                                                                                                                                                                                                                                                                                        | on and/or election                                                                                                                  | requirement.                                                                                                                      |                                                                                                      |            |  |  |  |
| Applicat                                      | ion Papers                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                     |                                                                                                                                   |                                                                                                      |            |  |  |  |
| 9)[                                           | The specification is objected to by the                                                                                                                                                                                                                                                                                                                                                                                                                                 | Examiner.                                                                                                                           | •                                                                                                                                 |                                                                                                      |            |  |  |  |
| 10)                                           | The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                     |                                                                                                                                   |                                                                                                      |            |  |  |  |
|                                               | Applicant may not request that any object                                                                                                                                                                                                                                                                                                                                                                                                                               | ion to the drawing(s)                                                                                                               | be held in abeyance. S                                                                                                            | See 37 CFR 1.85(a).                                                                                  |            |  |  |  |
|                                               | Replacement drawing sheet(s) including to                                                                                                                                                                                                                                                                                                                                                                                                                               | he correction is requi                                                                                                              | red if the drawing(s) is                                                                                                          | objected to. See 37 CFR                                                                              | 1.121(d).  |  |  |  |
| 11)                                           | The oath or declaration is objected to                                                                                                                                                                                                                                                                                                                                                                                                                                  | by the Examiner. N                                                                                                                  | lote the attached Offi                                                                                                            | ce Action or form PTO-                                                                               | 152.       |  |  |  |
| Priority (                                    | under 35 U.S.C. § 119                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                     | •                                                                                                                                 |                                                                                                      |            |  |  |  |
| а)                                            | Acknowledgment is made of a claim for All b) Some * c) None of:  1. Certified copies of the priority of Some * Copies of the priority of Some * Copies of the priority of Some * Copies of the certified copies of application from the Internation See the attached detailed Office action                             | ocuments have be<br>ocuments have be<br>f the priority docum<br>al Bureau (PCT Ru                                                   | en received.<br>en received in Applic<br>nents have been rece<br>lle 17.2(a)).                                                    | ation No<br>ived in this National Sta                                                                | age        |  |  |  |
| Attachmer                                     | ıt(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                     |                                                                                                                                   |                                                                                                      |            |  |  |  |
|                                               | ce of References Cited (PTO-892)                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                     | 4) Interview Summa                                                                                                                |                                                                                                      |            |  |  |  |
|                                               | ce of Draftsperson's Patent Drawing Review (PT mation Disclosure Statement(s) (PTO-1449 or F                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                     | Paper No(s)/Mail 5) Notice of Informa                                                                                             | Date  Patent Application (PTO-15                                                                     | 52)        |  |  |  |
|                                               | er No(s)/Mail Date <u>4/3/2002</u> .                                                                                                                                                                                                                                                                                                                                                                                                                                    | . 5. 5 2. 5 6 7                                                                                                                     | 6) Other:                                                                                                                         | · ·                                                                                                  |            |  |  |  |

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 2. Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being vague and indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 3. Claim 1, 12-13, and 24 are rejected under 35 U.S.C. 112, second paragraph, as being vague and indefinite in that it fails to point out what is included or excluded by the claim language. The term "substantially" is not clearly explained in the application.

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1, 9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmerman et al. ("Zimmerman", US 2001/0012990) in view of Meyer et al. ("Meyer", US 6,611,495).

As per claim 1, Zimmerman teaches a method for modeling a computing architecture, the method comprising:

identifying a plurality of computing layers, each computing layer representing a functional layer of the computing architecture (para.4);

identifying a computing system (para.3);

identifying, for the computing system, at least one of the plurality of computing layers that is implemented by the computing system (para.18);

displaying a first plurality of bars in stacked relationship to each other, each of the first plurality of bars representing a computing layer of the plurality of computing layers (Fig.4).

However, Zimmerman does not teach a plurality of computing systems and displaying a second plurality of bars substantially orthogonal to the first plurality of bars and over at least a portion of the first plurality of bars, each of the second plurality of bars representing a computing system, wherein each of the second plurality of bars extends through a portion of the first plurality of bars an amount corresponding to the identified at least one of the computing layers that is implemented by the computing system represented by the bar. Meyer teaches a method of displaying computing layers in a stacked relationship with the plurality of computing systems orthogonal to the corresponding layers implemented by the system (Fig.1, systems 22a and 22b). It would have been obvious to one of ordinary skill in the art at the time of invention to combine Meyer's teaching with Zimmerman's method of modeling to visually display the relationships within systems.

As per claim 9, Meyer teaches displaying a first plurality of bars, from top to bottom, a horizontal bar for each of a presentation layer, a business logic layer, a data layer, and an infrastructure layer (Fig.1; col.1, lines 40-63).

As per claim 11, Meyer teaches displaying a conduit within one of the first plurality of bars, the conduit representing communication links between computing systems (Fig.1, 24).

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6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmerman et al. ("Zimmerman", US 2001/0012990) and Meyer et al. ("Meyer", US 6,611,495) as applied to claim 1 above, and further in view of Lee (US 2001/0054035).

As per claim 2, Meyer teaches displaying a first rectangle stacked adjacent to the first plurality of bars (Fig.1, 25a). However, the method of Zimmerman and Meyer does not teach if the computing architecture comprises a human interface portal, the first rectangle representing a human interface portal. Lee teaches the display of a rectangle representing an interface portal (Fig. 6A). It would have been obvious to one of ordinary skill in the art at the time of invention to combine Lee's teaching with the method of Zimmerman and Meyer to visually display the association of portals to the systems.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmerman et al. ("Zimmerman", US 2001/0012990) and Meyer et al. ("Meyer", US 6,611,495) as applied to claim 1 above, and further in view of Sheard et al. ("Sheard", US 6,208,345).

As per claim 3, Meyer teaches displaying a second rectangle stacked adjacent to the first plurality of bars (Fig.1, 25b). However, the method of Zimmerman and Meyer does not teach if the computing architecture comprises a business to business integration, the second rectangle representing a business to business integration. Sheard teaches the visual representation of data architecture displaying a rectangle for business integration (Fig.15). It would have been obvious to one of ordinary skill in the art at the time of invention to combine Sheard's teaching with the method of Zimmerman and Meyer to visually display the interconnections between businesses.

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8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmerman et al. ("Zimmerman", US 2001/0012990) and Meyer et al. ("Meyer", US 6,611,495) as applied to claim 1 above, and further in view of Vanden Huevel et al. ("Vanden Huevel", US 5,426,422).

As per claim 4, the method of Zimmerman and Meyer does not teach displaying an icon to indicate a preselected area of the computing architecture. Vanden Huevel teaches the display of icons representing preselected areas (Fig.6, col.5, lines 54-57). It would have been obvious to one of ordinary skill in the art at the time of invention to combine Vanden Huevel's teaching with the method of Zimmerman and Meyer to visually display the areas that were accessed before.

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmerman et al. ("Zimmerman", US 2001/0012990) and Meyer et al. ("Meyer", US 6,611,495) as applied to claim 1 above, and further in view of Tanaka (US 5,249,296).

As per claim 8, the method of Zimmerman and Meyer teaches identifying computing systems having a predefined computing function (Zimmerman, para.3; Meyer, Fig.1, Sending and Receiving System). However, the method of Zimmerman and Meyer does not teach displaying an icon to represent the predefined computing function. Tanaka teaches a method of displaying icons to represent functions (col.1, lines 23-25). It would have been obvious to one of ordinary skill in the art at the time of invention to combine Tanaka's teaching with the method of Zimmerman and Meyer to visually enhance the model.

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## Allowable Subject Matter

10. Claims 5-7, 10, and 12 would be allowable if rewritten to overcome the rejection(s) under

35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations

of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter:

The patentable distinction of claims 5-7 over the prior art is the limitation of displaying

an icon representing a data store that is proximate a bar corresponding to the data store and

displaying interconnections between the plurality of data stores. The patentable distinction of

claim 10 over the prior art is the limitation of selecting one of the bars and displaying details

within the selected bar. The patentable distinction of claim 12 over the prior art is the limitation

of selecting a computing system and displaying a plurality of bars representing a sub-system of

the selected computing system. While the prior art teaches the display of computing layers in a

stacked bar relationship, the prior art fails to anticipate or render the above cited limitations

obvious.

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#### Communications

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sajeda Muhebbullah whose telephone number is (703) 305-0720 (note after Oct. 20th number will be changed to (571)272-4065). The examiner can normally be reached on Tuesday/Thursday from 8:00 am to 4:30 pm (EST) and on alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid, can be reached on (703) 308-0640 (note after Oct. 20th number will be changed to (571)272-4063).

The fax number for the organization where this application or proceeding is assigned are as follows:

(703) 746-7238 [After Final Communication]

(703) 872-9306 [Official Communication]

(703) 746-9915 [For status inquiries, Draft Communication]

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Sajeda Muhebbullah Patent Examiner September 7, 2004 KRISTINE KINCAID
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100